

# Increasing muscle mass through resistance training to improve soccer



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## Introduction/Rationale Plan

A large amount of health and wellness research advocates for cardiorespiratory activity as the best approach to support good health. Although the advantages of cardiorespiratory fitness are well documented and promoted by public health guidelines, individuals looking to increase muscle size and mass would benefit from resistance training as a more effective training regime. Resistance training, if performed safely and correctly, can present individuals with many positive physical and physiological changes, as well as serve as a preventative measure against various conditions. In preparation for my upcoming competitive soccer season and to achieve long term health benefits, my current fitness goal is to increase muscle mass in relation to my overall body weight. To achieve this goal, I will be incorporating additional resistance training into my weekly routine.

## Behavior Change

To begin the process of achieving my fitness goal, I need to modify my fitness behavior to include resistance training. I will increase my strength training practices from once per week to four times per week, as an attempt to raise my overall skeletal muscle mass ratio. During my training days, I will be attending a sport specific gym and will record my movements as well as the weights used for each. I will be engaging in regular roll-out and stretching sessions on the days I am not exercising, in order to make sure that my body is recovered enough to avoid injuries and be ready for training.

As there is a direct correlation between muscle mass and strength, the use of a body composition scale can help determine whether one week of increased resistance training will cause significant strength gain. I will use this body composition scale both before and after the completion of my testing week to receive statistical results of my behavior change. The ultimate goal, however, is not to focus on the results that arise solely from one week of my training, but to become comfortable incorporating resistance training into my weekly routine and build good habits for the future. I believe that the introduction of this behavior into my normal training will increase my self-efficacy and therefore, my performance, as I expect to feel stronger and more prepared to go into hard tackles or compete against larger opponents.

### General Benefits of Resistance Training

Research states that positive effects of resistance training include reduction of risk factors such as insulin resistance, resting metabolic rate, body fat percentage, and blood pressure, all of which, are connected with diabetes, heart disease, and cancer. Short term strength training can show increases in muscle mass and strength, resulting in a decreased risk for metabolic syndrome in various individuals. Engaging in resistance training, even for short periods of time, has shown significant improvements to the prevention of these conditions (Winett & Carpinelli, 2001). In addition, resistance training is shown to have more profound effects in preventing osteoporosis than aerobic activity, and serves as a means to improve bone health by increasing strength, balance and muscle mass (Layne & Nelson, 1999). This is important because as I move into a normal lifestyle after university <https://assignbuster.com/increasing-muscle-mass-through-resistance-training-to-improve-soccer/>

athletics, I will need to have a solid base in place to maintain good health and increase longevity. Resistance training also aids in injury prevention and joint protection which ultimately reduces the chance of more sophisticated complications that can arise as I get older.

**Increased Muscle Mass.** Increasing skeletal muscle mass percentage has many benefits for both athletes and general populations. A study conducted by Visser et al. (2005) showed a positive relationship between greater muscle mass, greater strength and increased functionality and mobility (Visser et al., 2005). Increases in muscle mass are also associated with decreased fat mass and has preventative features that work against cardiovascular risk factors and decrease the risk of premature cardiovascular disease (Atlantis, Martin, Haren, Taylor, & Wittert, 2009).

**Resistance Training and Soccer.** Along with the general health benefits associated with resistance training, it is important that my resistance training sessions are planned with a specific goal that would benefit my sport performance as well. Research conducted by Hoff & Helgerud (2004) has shown that engaging in fewer repetitions and higher loads using concentric force has proved to be effective in increasing strength and related parameters essential for improving soccer performance (Hoff & Helgerud, 2004). Similarly, other research demonstrates that elite soccer players that have focused on maximal strength training with prominence on mobilization of concentric movements, improved their overall sprint and jump performance (Wisloff, Castagna, Helgerud, Jones & Hoff, 2004). Studies show that there is no negative correlation between strength, endurance and speed, which is a common misconception in the fitness industry. Increasing <https://assignbuster.com/increasing-muscle-mass-through-resistance-training-to-improve-soccer/>

my strength will help me with the body-contact and power component and of soccer. Improved functionality and mobility, as a result of increased muscle mass, will allow me to be fluid and agile, adapting quickly to the spontaneity of the game.

To summarize, introduction of a normal resistance training routine can have positive effects on many physiological components and has application to both athletic and non-athletic populations. Resistance training can be modified depending on the individual and can be easily incorporated into busy schedules because it does not have to be performed every day in order to see meaningful benefits and results. I am looking forward to taking steps toward achieving my goals and benefitting my overall well-being and sport performance.

## References

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